

Semantic Web technologies

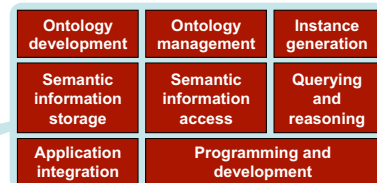
INTRODUCTION METHODS MANUAL AUTOMATIC CONCLUSIONS

The Semantic Web is:

- “An extension of the current web in which information is given well-defined meaning, better enabling computers and people to work in cooperation” [Berners-Lee et al., 2001]
- A common framework for data sharing and reusing across applications

- Distinctive characteristics:
 - Use of W3C standards
 - Use ontologies as data models
 - Inference of new information
 - Open world assumption

- High heterogeneity:
 - Different functionalities
 - In general
 - In particular
 - Different knowledge representation formalisms
 - Different expressivity
 - Different reasoning capabilities



- Visualization of large hierarchies
- Transaction support
- Optimized reasoning for class subsumption
- etc.

ESWC 2009 Tutorial on Evaluation of Semantic Web technologies

Evaluating the interoperability of Semantic Web technologies



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Interoperability in the Semantic Web

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- Interoperability is the ability that Semantic Web technologies have to interchange ontologies and use them
 - At the information level; not at the system level
 - In terms of knowledge reuse; not information integration
- In the real world it is not feasible to use a single system or a single formalism
- Different behaviours in interchanges between different formalisms:

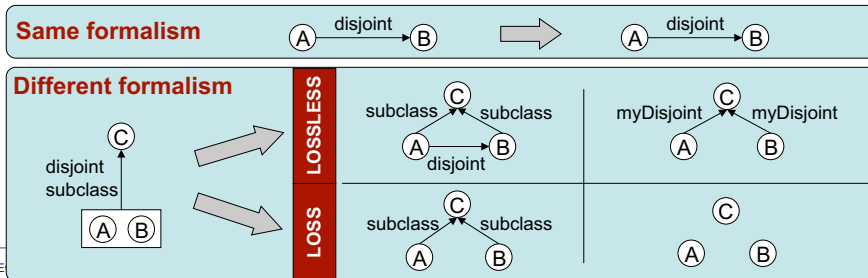


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